

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

|  |   |  |
|--|---|--|
| Applicant's or agent's file reference<br><b>ST005PCT</b>   | <b>FOR FURTHER ACTION</b>   | See item 4 below   |
| International application No.<br><b>PCT/AU2004/001082</b>  | International filing date ( <i>day/month/year</i> )<br><b>13 August 2004 (13.08.2004)</b> | Priority date ( <i>day/month/year</i> )<br><b>31 October 2003 (31.10.2003)</b> |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |   |  |
| Applicant<br><b>SAINTECH PTY LTD</b>   |   |  |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

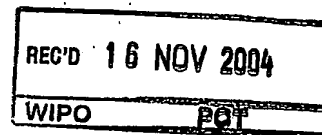
3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

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|---|--|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland<br><br>Facsimile No. +41 22 740 14 35 | Date of issuance of this report<br><b>01 May 2006 (01.05.2006)</b><br><br>Authorized officer<br><br><div style="text-align: center; font-weight: bold; font-size: 1.2em;">Dorothee Mülhausen</div><br>Telephone No. +41 22 338 87 40 |
|---|--|

# PATENT COOPERATION TREATY



From the:  
INTERNATIONAL SEARCHING AUTHORITY

To:

Darren Gardner  
c/- Saintech Pty Ltd  
Unit 6, 43 College Street  
Gladesville NSW 2111

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|  |   |
|--|---|
| Date of mailing<br>(day/month/year) <span style="float: right;"><b>5 NOV 2004</b></span>   |   |
| Applicant's or agent's file reference<br><b>ST005PCT</b>   | <b>FOR FURTHER ACTION</b><br>See paragraph 2 below                  |
| International application No.<br><b>PCT/AU2004/001082</b>  | International filing date (day/month/year)<br><b>13 August 2004</b> |
| Priority date (day/month/year)<br><b>31 October 2003</b>   |   |
| International Patent Classification (IPC) or both national classification and IPC<br><b>Int. Cl.<sup>7</sup> H01J 37/08, 27/02</b> |   |
| Applicant<br><b>SAINTECH PTY LTD et al</b>   |   |

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

|   |   |
|---|---|
| Name and mailing address of the IPEA/AU<br>AUSTRALIAN PATENT OFFICE<br>PO BOX 200, WODEN ACT 2606, AUSTRALIA<br>E-mail address: pct@ipaustalia.gov.au<br>Facsimile No. (02) 6285 3929 | Authorized Officer<br><br><b>JULIA HU</b><br>Telephone No. (02) 6283 2754 |
|---|---|

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/AU2004/001082**

**Box No. I      Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/AU2004/001082**

**Box No. V**      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |             |     |
|-------------------------------|-------------|-----|
| Novelty (N)                   | Claims 1-30 | YES |
|                               | Claims      | NO  |
| Inventive step (IS)           | Claims 1-30 | YES |
|                               | Claims      | NO  |
| Industrial applicability (IA) | Claims 1-30 | YES |
|                               | Claims      | NO  |

**2. Citations and explanations:**

**NOVELTY (N) AND INVENTIVE STEP (IS) claims 1-30**

The invention of the claims is an ion source operated with a control system that generates an anode voltage comprising a mains rectified signal such that the anode voltage modulates between a first voltage above a threshold and a second voltage below the threshold, which can prevent the unnecessary cut out of the power supply due to spurious events in the vacuum chamber.

All the documents cited in the International Search Report were category A only. No individual citation or obvious combination of citations disclose or fairly suggest such an ion source control system.